5

IMPROVING SEM INSPECTION AND ANALYSIS OF PATTERNED PHOTORESIST FEATURES

ABSTRACT OF THE DISCLOSURE

A process for improving the accuracy of critical dimension measurements of features patterned on a photoresist layer using a scanning electron microscope (SEM) is disclosed herein. The process includes providing an electron beam to the photoresist layer and transforming the surface of the photoresist layer before the SEM inspection. The surface of the photoresist layer is transformed to trap the outgassing volatile species and dissipates built up charge in the photoresist layer, resulting in SEM images without poor image contrast.